Application No.: 09/653,527 Docket No.: M4065.0814/P814

Amendment dated December 28, 2004

Reply to Office action dated October 6, 2004

AMENDMENTS TO THE SPECIFICATION

On page 2, please insert the following new paragraph after line 7 and before

"DETAILED DESCRIPTION"

Figure 3 shows an active pixel sensor according to an exemplary embodiment of

the invention.

On page 5, please replace the paragraph beginning at line 21 with the following:

In operation, the VDD_{N-1} line 205 first rises at 210. This boosts the voltage on

the floating diffusion on line N. This also boosts the reset on line N-1 and also begins the

first selecting pulse time period 212. During the second selecting pulse time 226, the

VDD line raises the level on the source follower 215.

On page 7, please replace the paragraph beginning at line 3 with the following:

The line 230 shows the photodiode boosting that occurs. During the reset

pulse, the output is boosted by an amount 232. Importantly, the drains of the reset

transistor [[216]] 225 and the source follower 215 for the same photodiode are connected

to different VDD lines. The joint VDD contact for the reset transistor drain of one

photodiode is connected to the source follower drain of another photodiode. For

example, Figure 2 shows the gate of source follower 215 being connected to the drain of

the reset transistor 225 for a separate line. This layout can save pixel space, provide

improved improve FF, quantum efficiency, and have a relatively small pixel pitch.

2